

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims:

1.- 14. (Cancelled)

15. (Currently Amended) A method of drilling an open hole in a subterranean formation, comprising the steps of:

circulating through the drill pipe and drill bit a well drill-in and servicing fluid comprising a viscosified fluid, a fluid loss control additive, and a bridging agent ~~comprising that~~ is a degradable material;

forming a self-degrading filter cake comprising the bridging agent within the formation; and

permitting the filter cake to self-degrade.

16. (Original) The method of claim 15 wherein the step of forming a self-degrading filter cake comprises forming the filter cake upon the face of the formation itself, upon a sand screen, or upon a gravel pack.

17. (Original) The method of claim 15 wherein the step of permitting the filter cake to self-degrade comprises contacting the filter cake with a degrading agent for a period of time such that the bridging agent is dissolved thereby.

18. (Original) The method of claim 17 wherein the well drill-in and servicing fluid comprises the degrading agent.

19. (Cancelled)

20. (Original) The method of claim 17 wherein the degrading agent comprises water.

21. (Original) The method of claim 15 wherein the degradable material comprises a degradable polymer or a dehydrated compound.

22. (Currently Amended) The method of claim 21 wherein the degradable polymer comprises ~~polysaccharides, chitins, chitosans, proteins, orthoesters, aliphatic polyesters, poly(glycolides), poly(lactides), poly(ϵ -caprolactones), poly(hydroxybutyrate)s, polyanhydrides, aliphatic polycarbonates, poly(orthoesters), poly(amino acids), poly(ethylene oxides), or polyphosphazenes~~ at least one degradable polymer selected from the group consisting of a polysaccharide, a chitin, a chitosan, a protein, an orthoester, an aliphatic polyester, a

poly(glycolide), a poly(lactide), a poly(ϵ -caprolactone), a poly(hydroxybutyrate), a polyanhydride, an aliphatic polycarbonate, a poly(orthoester), a poly(amino acid), a poly(ethylene oxide), and a polyphosphazene.

23. (Original) The method of claim 15 wherein the degradable material comprises a plasticizer.

24. (Withdrawn) The method of claim 21 wherein the dehydrated compound comprises anhydrous sodium tetraborate or anhydrous boric acid.

25. (Withdrawn) The method of claim 15 wherein the degradable material comprises a stereoisomer of a poly(lactide).

26. (Withdrawn) The method of claim 15 wherein the degradable material comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate, boric oxide, calcium carbonate, and magnesium oxide.

27. (Withdrawn) The method of claim 26 wherein the poly(lactic acid) is present in a stoichiometric amount.

28. (Original) The method of claim 15 wherein the degradable material has a particle size distribution in the range of from about 0.1 micron to about 1.0 millimeter.

29. (Currently Amended) The method of claim 15 wherein the bridging agent ~~comprising the degradable material~~ is present in the well drill-in and servicing fluid in an amount sufficient to create an efficient filter cake.

30. (Currently Amended) The method of claim 29 wherein the bridging agent ~~comprising the degradable material~~ is present in the well drill-in and servicing fluid in an amount in the range of from about 0.1% to about 30% by weight.

31. (Withdrawn) The method of claim 15 wherein the viscosified fluid comprises a viscosifier; wherein the viscosifier is present in the well drill-in and servicing fluid in an amount in the range of from about 0.13% to about 0.16% by weight; wherein the viscosifier is xanthan; wherein the fluid loss control additive is present in the well drill-in and servicing fluid in an amount in the range of from about 1% to about 1.3% by weight; wherein the fluid loss control additive is starch; wherein the bridging agent comprising the degradable material is present in the well drill-in and servicing fluid in the range of from about 1% to about 5% by weight; and wherein the degradable material comprises poly(lactic acid) and either calcium carbonate or magnesium oxide.

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Cancelled)

39. (Cancelled)

40. (Cancelled)

41. (Cancelled)

42. (Cancelled)

43. (Cancelled)

44. (Cancelled)

45. (Cancelled)

46. (Cancelled)

47. (Currently Amended) A well drill-in and servicing fluid comprising:
a viscosified fluid;
a fluid loss control additive; and
a bridging agent ~~comprising that is~~ a degradable material.

48. (Original) The well drill-in and servicing fluid of claim 47 wherein the degradable material comprises a degradable polymer or a dehydrated compound.

49. (Currently Amended) The well drill-in and servicing fluid of claim 48 wherein the degradable polymer comprises ~~polysaccharides, chitins, chitosans, proteins, orthoesters, aliphatic polyesters, poly(glycolides), poly(lactides), poly(ϵ -caprolactones), poly(hydroxybutyrate)s, polyanhydrides, aliphatic polycarbonates, poly(orthoesters), poly(amino acids), poly(ethylene oxides), or polyphosphazenes~~ at least one degradable polymer selected from the group consisting of a polysaccharide, a chitin, a chitosan, a protein, an orthoester, an aliphatic polyester, a poly(glycolide), a poly(lactide), a poly(ϵ -caprolactone), a poly(hydroxybutyrate), a polyanhydride, an aliphatic polycarbonate, a poly(orthoester), a poly(amino acid), a poly(ethylene oxide), and a polyphosphazene.

50. (Original) The well drill-in and servicing fluid of claim 47 wherein the degradable material comprises a plasticizer.

51. (Withdrawn) The well drill-in and servicing fluid of claim 48 wherein the dehydrated compound comprises anhydrous sodium tetraborate or anhydrous boric acid.

52. (Withdrawn) The well drill-in and servicing fluid of claim 47 wherein the degradable material comprises a stereoisomer of a poly(lactide).

53. (Withdrawn) The well drill-in and servicing fluid of claim 47 wherein the degradable material comprises poly(lactic acid) and a compound chosen from the group consisting of sodium borate, boric oxide, calcium carbonate, and magnesium oxide.

54. (Withdrawn) The well drill-in and servicing fluid of claim 53 wherein the poly(lactic acid) is present in a stoichiometric amount.

55. (Original) The well drill-in and servicing fluid of claim 47 wherein the degradable material has a particle size distribution in the range of from about 0.1 micron to about 1.0 millimeter.

56. (Original) The well drill-in and servicing fluid of claim 47 wherein the viscosified fluid is present in the well drill-in and servicing fluid in an amount in the range of from about 68% to about 99% by weight.

57. (Original) The well drill-in and servicing fluid of claim 47 wherein the viscosified fluid comprises water, oil, or a mixture thereof.

58. (Original) The well drill-in and servicing fluid of claim 47 wherein the viscosified fluid comprises a viscosifier.

59. (Original) The well drill-in and servicing fluid of claim 58 wherein the viscosifier is present in the well drill-in and servicing fluids of the present invention in an amount sufficient to suspend the bridging agent in the well drill-in and servicing fluid for a desired period of time.

60. (Original) The well drill-in and servicing fluid of claim 58 wherein the viscosifier is present in the well drill-in and servicing fluids of the present invention in an amount in the range of from about 0.01% to about 0.6% by weight.

61. (Original) The well drill-in and servicing fluid of claim 58 wherein the viscosifier comprises a biopolymer, a cellulose derivative, guar, or a guar derivative.

62. (Original) The well drill-in and servicing fluid of claim 61 wherein the viscosifier is xanthan.

63. (Original) The well drill-in and servicing fluid of claim 47 wherein the fluid loss control additive is present in the well drill-in and servicing fluid in an amount sufficient to provide a desired degree of fluid loss control.

64. (Original) The well drill-in and servicing fluid of claim 47 wherein the fluid loss control additive is present in the well drill-in and servicing fluid in an amount in the range of from about 0.01% to about 2% by weight.

65. (Original) The well drill-in and servicing fluid of claim 47 wherein the fluid loss control additive comprises starch, starch ether derivatives, hydroxyethylcellulose, cross-linked hydroxyethylcellulose, or mixtures thereof.

66. (Currently Amended) The well drill-in and servicing fluid of claim 47 wherein the bridging agent ~~comprising the degradable material~~ is present in the well drill-in and servicing fluid in an amount sufficient to create a desirable number of voids in the filter cake.

67. (Currently Amended) The well drill-in and servicing fluid of claim 47 wherein the bridging agent ~~comprising the degradable material~~ is present in the well drill-in and servicing fluid ranging from about 0.1% to about 30% by weight.

68. (Withdrawn) The well drill-in and servicing fluid of claim 47 wherein the viscosified fluid comprises a viscosifier; wherein the viscosifier is present in the well drill-in and servicing fluids of the present invention in an amount in the range of from about 0.13% to about 0.16% by weight; wherein the viscosifier is xanthan; wherein the fluid loss control additive is present in the well drill-in and servicing fluid in an amount in the range of from about 1% to about 1.3% by weight; wherein the fluid loss control additive is starch; wherein the bridging agent comprising the degradable material is present in the well drill-in and servicing fluid in the range of from about 1% to about 5% by weight; and wherein the degradable material comprises poly(lactic acid) and either calcium carbonate or magnesium oxide.

69. - 81. (Cancelled)